Amendments to the Specification:

Please replace the paragraph beginning on page 10, line 4, with the following rewritten paragraph:

By plasma irradiation and irradiation of vacuum ultraviolet rays generated from the excited gas, not only the surfaces of the particle but also the inner surfaces of the pores can be excited. When the particle having the ~~exited~~ excited surfaces is soaked in the monomer solution or brought into contact with monomers in gas phase, radicals generated on the excited surfaces causes graft polymerization to progress so that the grafted polymers cover the particle surface as well as filling pores of the particles. By generating grafted polymers of normal chains instead of cross-linking, a drug deliver particle capable of quickly responding to a change in environment can be prepared.

Please add the following new paragraph after the paragraph ending on line 23 of page 12:

The term "critical solution temperature" is generally understood to mean the temperature above which an immiscible-liquid system no longer separates into two liquid phases. Some liquid systems also have a "lower critical solution temperature," below which the system is totally miscible. In systems that include a polymer component and a liquid solute phase, "lower critical solution temperature" is a term of art relating to a temperature at which the behavior of the polymer systems is changed. In such systems, the polymer solution undergoes reversible and repeatable changes in response to whether the temperature is above or below the lower critical solution temperature of the system. For example, the polymer may change from a hydrophobic to a hydrophilic state, as in the high density grafted polymers of embodiments, or the polymer may shrink and/or swell in response, as in the low density grafted polymers of embodiments.

Please replace the paragraph beginning on page 17, line 21, with the following rewritten paragraph:

The grafted polymers may be obtained by plasma graft polymerization (described later) of a monomer. As a monomer used for the plasma graft polymerization, for example, acrylic acid, methyl acrylate, glycidyl acrylate, ethyl acrylate, butyl acrylate, 2-ethylhexyl acrylate, benzyl acrylate, methyl methacrylate, butyl methacrylate, 2-ethylhexyl methacrylate, 2-dimethylaminoethyl ~~metacrylate~~methacrylate, 2-diethylaminoethyl ~~metacrylate~~methacrylate, 2-dimethylaminoethyl acrylate, 2-diethylaminoethyl acrylate, 2-vinylpyridine, styrene, α-methyl styrene, acrylonitrile, acrylamide, N-isopropyl acrylamide (NIPAM), allylamine, an allyl alcohol, diallylamine, diallyl maleate, allyl glycidyl ether, ~~vinil acetato~~vinyl acetate, N-vinyl-2-pyrrolidone, ethyl vinyl ether, methyl vinyl ketone, divinylbenzene, 2-hydroxyethyl acrylate, ethylene glycol dimethacrylate, 2-hydroxyethyl methacrylate, 2-hydroxypropyl methacrylate, a maleic anhydride, or the like may be used.

Please replace the paragraph beginning on page 20, line 10, with the following rewritten paragraph:

Fig. 2 shows an exemplary configuration of a plasma irradiation apparatus used in the above steps. The apparatus shown in Fig. 2 is a conventional fluidization column formation in which electrodes 108 connected to an external high-frequency power source 109 are provided on the lower portion of a low-pressure fluidization column body 105 made of glass where a porous dispersion plate 107 made of glass bead sintered bodies is also provided below the electrodes 108. A manometer 104 for measuring a difference in pressure between upper and lower portions of the low-pressure fluidization column body 105 and a vacuum ~~gage~~ gauge 106 for detecting the internal degree of vacuum are attached to the low-pressure fluidization column body 105. The low-pressure fluidization column body 105 is connected to a vacuum pump 101 through a flask 103 and decompressed by the vacuum pump 101. On

the other hand, a cylinder 113 feeds an inert gas and other gasses via a flow meter 110 into the inside of the low-pressure fluidization column body 105 from the bottom. Accordingly, in a state where the particles are placed on the dispersion plate 107 and the low-pressure fluidization column body 105 is set at a predetermined low pressure in a predetermined inert atmosphere, by turning the high-frequency power source 109 on to irradiate plasma, the particles can be treated by plasma irradiation.